Internet Mapping

CITY OF GAHANNA

Help Guide

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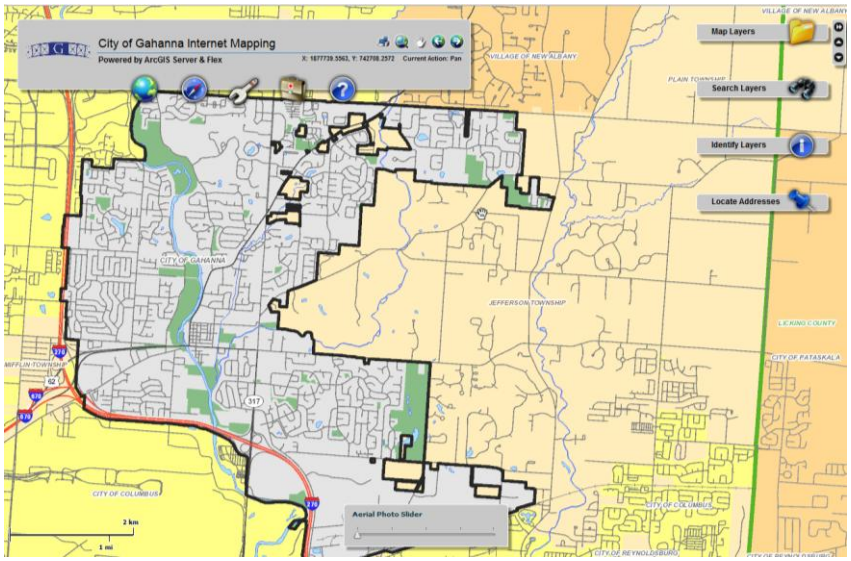
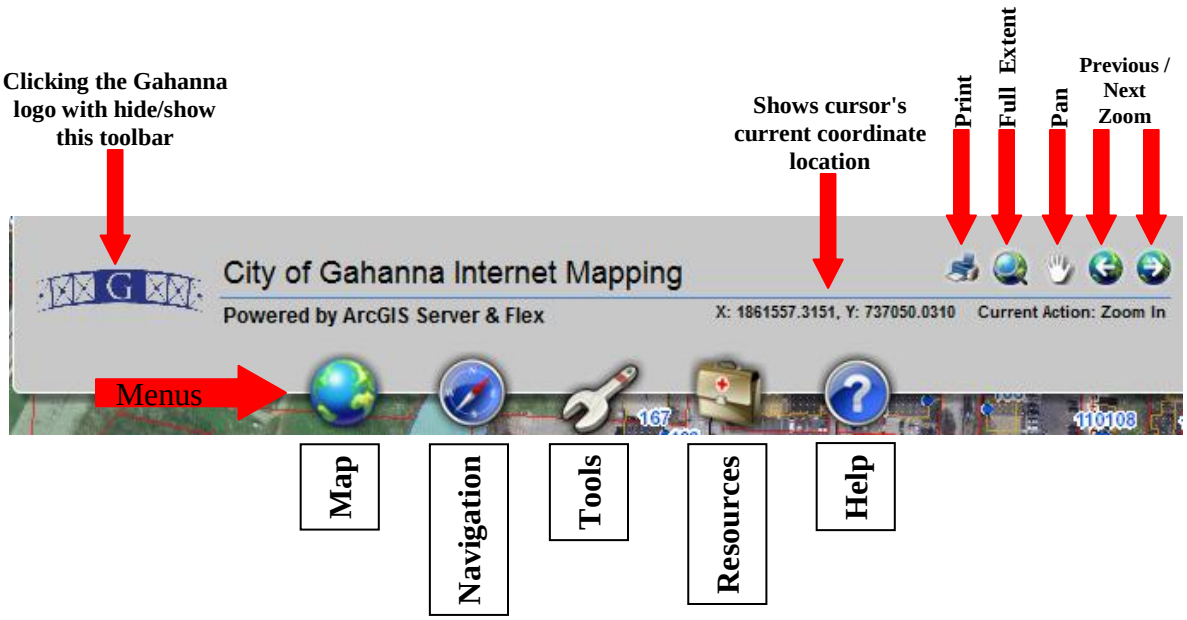
Chapter 1 - Getting Started

This section will familiarize you with the overall look of the internet mapping site and some of its functions.

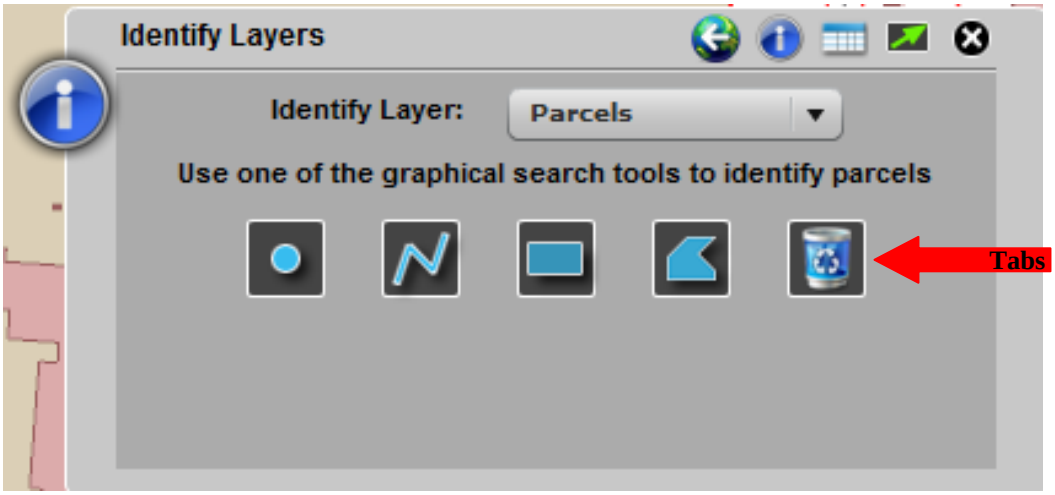
General Overview



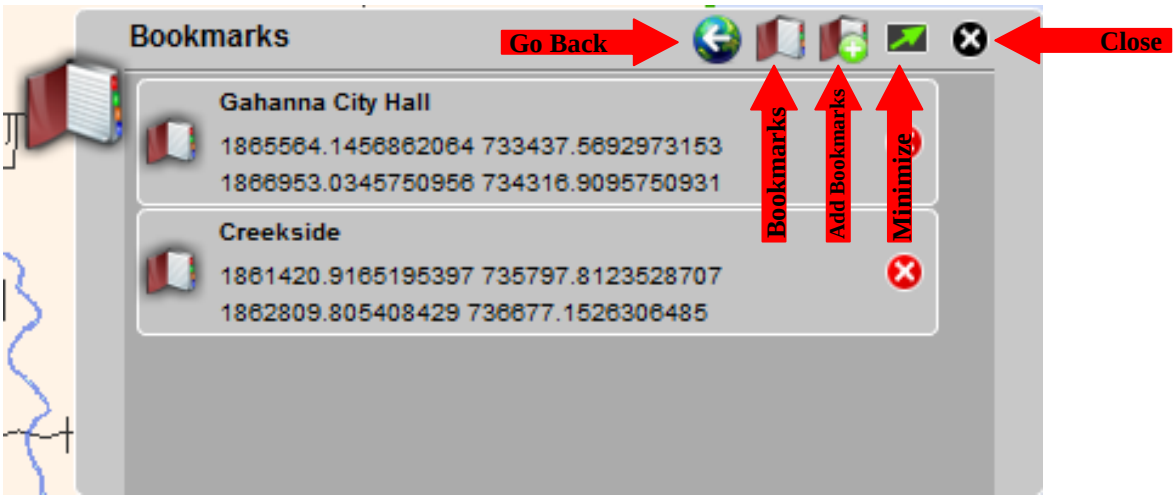


Widgets

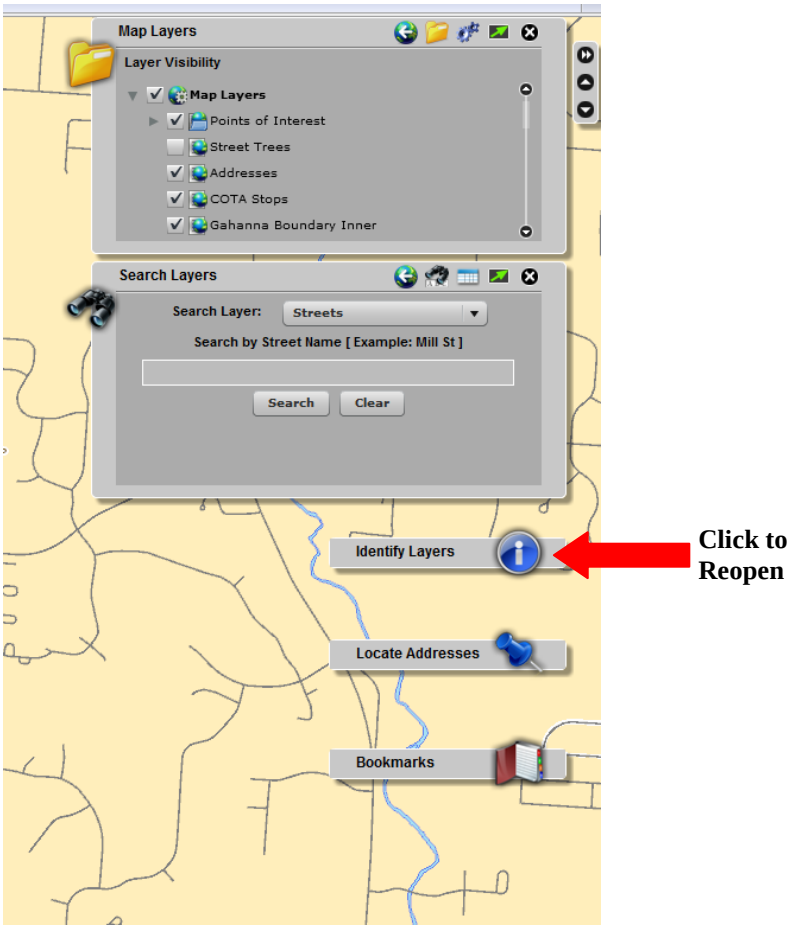
A widget is the window that will open up for various tools. There can be many tabs within a widget. The widget can be minimized or closed like a window.



Each widget has icons in the top right corner specific to that tool. All widgets will have the minimize and close icon. Based on the tool you are using, some of the other icons will change.



You can have multiple widgets opened at the same time. The example below shows 5 widgets that have been accessed. The top two are opened while the bottom three have been minimized. To reopen a widget simply click on the tool icon (to the right of the tool title).



The widgets can be managed by using the mini toolbar located on the right hand side of the screen.

This is especially useful when multiple widgets are open that extend beyond the screen parameters.

You can use the scroll arrows on the toolbar or to scroll up/down to view the hidden widgets.

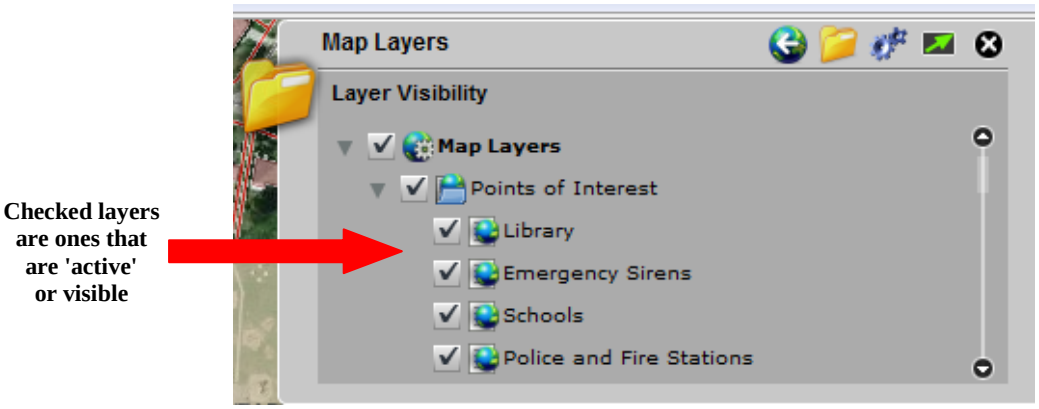
The top double arrow on the toolbar hides/shows or the widgets from view.

Chapter 2 - Map Menu

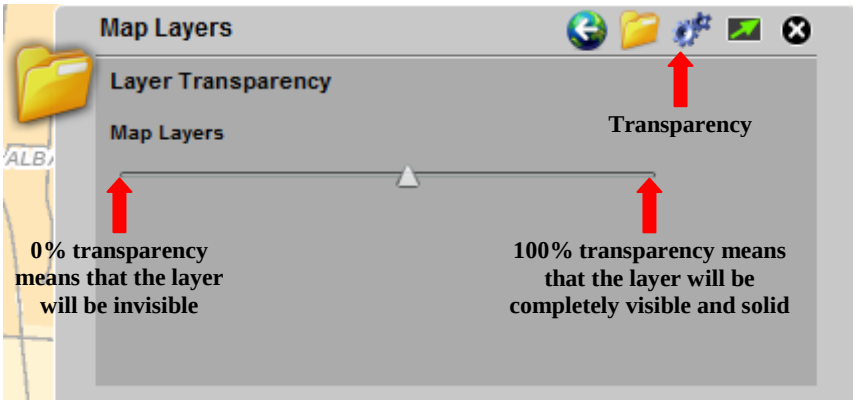
The map menu features tools used to directly manipulate the content of the map. There are several map types to choose from. There are also bookmarked locations found here. You can also decide which map layer you want to display in order to meet your needs.

Map Layers

This tool opens a widget where you can decide which layers you want to display in the base map. To minimize or expand a section, click once on the grey triangle arrow located left of the boxes.

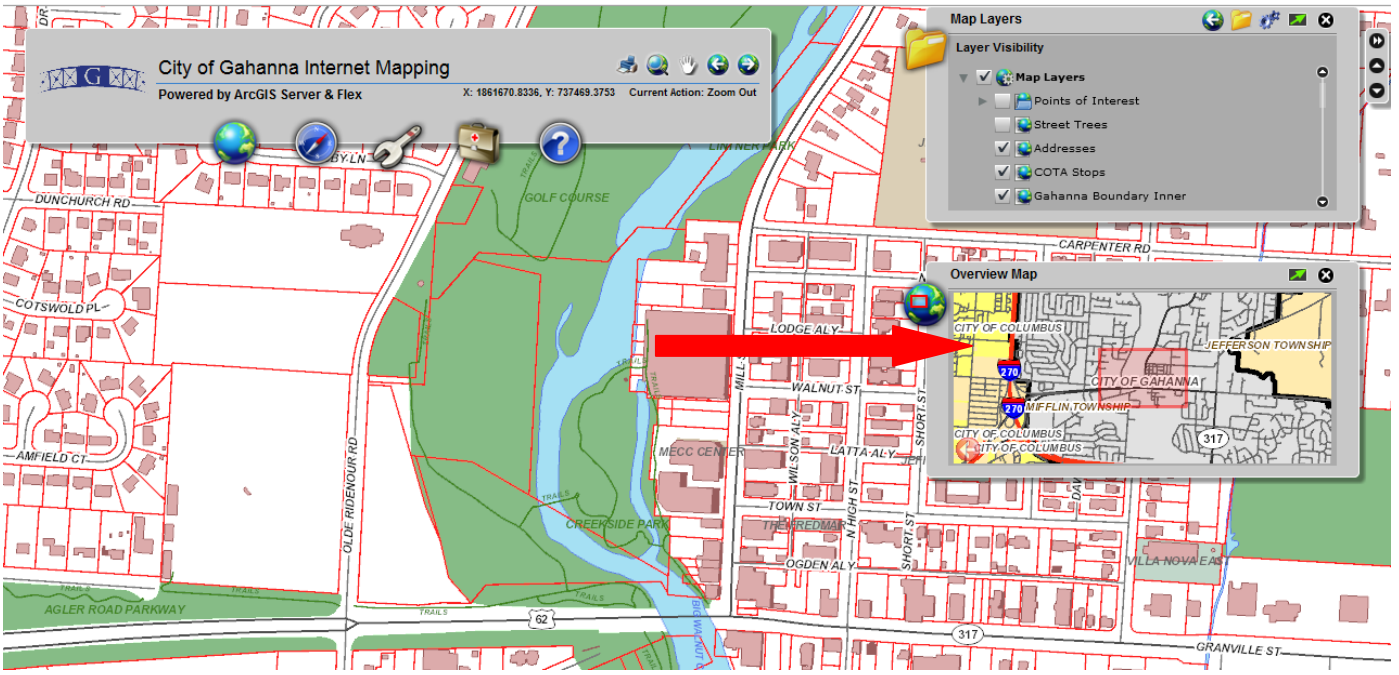


You can also change the transparency of the base map. Click on the layer transparency icon. Click and hold the triangle on the slide bar. Drag it to the left to decrease visibility and to the right to increase visibility.

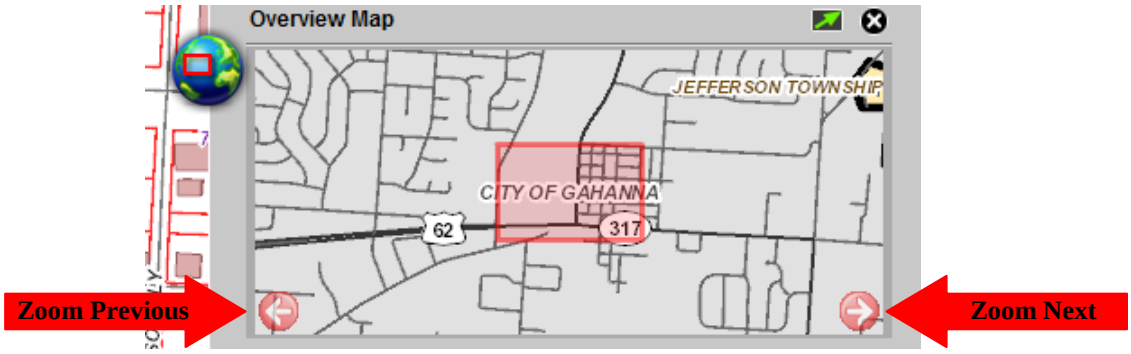


Overview Map

This tool opens a widget of a map with a broader view of the current map extent. It displays the location you are currently viewing as a red shaded area on a larger map. The red shaded box represents your current view. This will help give you a general idea of your location in reference to the surrounding area.



In the bottom left/right corner of the widget may be the zoom previous/zoom next tool. If you click one if the tools the map and overview map will shift to the respective extent.



You can click and hold the red shaded box in the widget and drag it around the widget window changing the viewing extent of the main map.

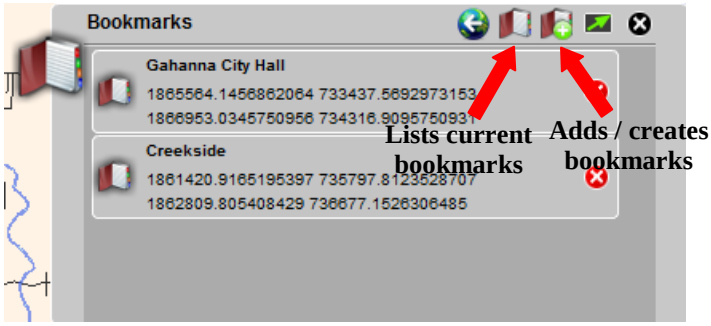
Bookmarks

This tool also brings up a widget containing all the current bookmarks that you have created. You can also create new bookmarks here. The bookmarks are similar to those of an internet browser.

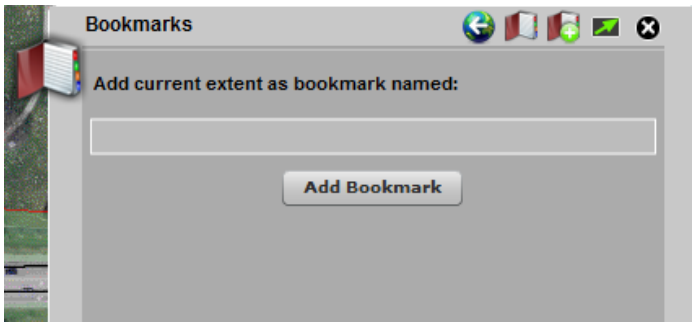
When the widget opens, a list of existing bookmarks automatically displays. If for some reason the list does not display, you can access it by clicking in the top right corner of the window on the 'Bookmarks' icon .

The list of bookmarks will have the name of the bookmark and the lat/long coordinates.

Note: There are two sets of coordinates for each bookmark since the bookmark represents a square instead of a single point.



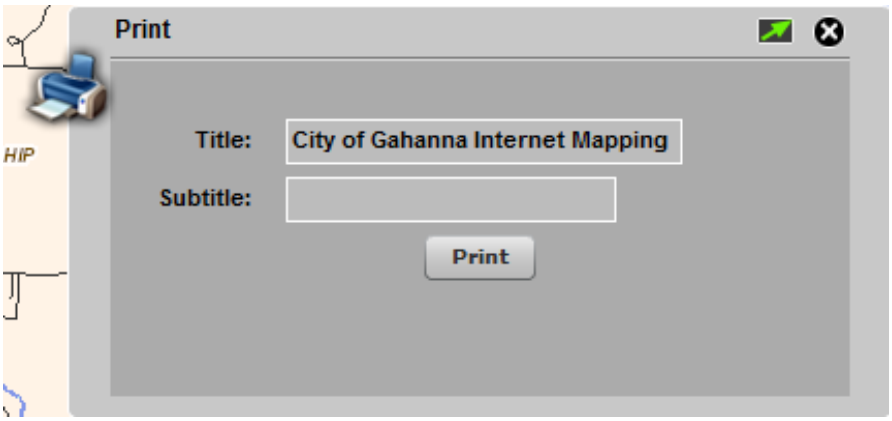
In order to create a bookmark, make sure the map is zoomed and panned in to the area you wish to save. Click the 'Add Bookmark' icon . Type the name you want for the bookmark. Click 'Add Bookmark' and it will be saved to your list.



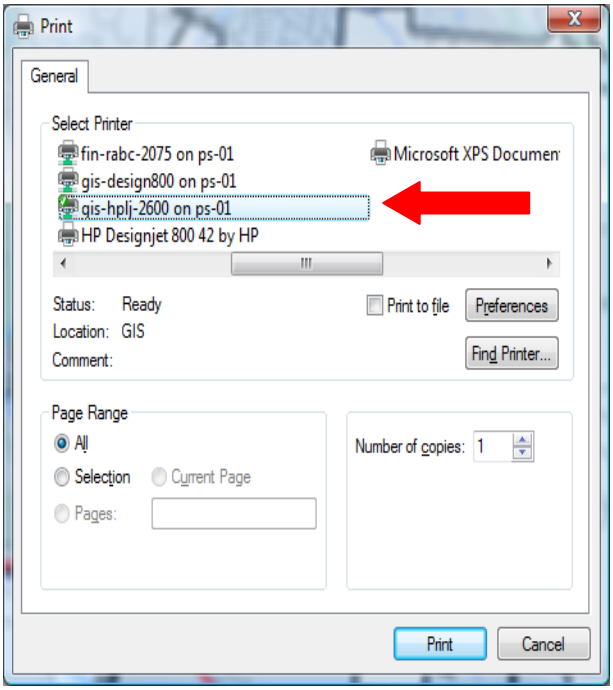
Note: Creating bookmarks this way will only save them to your computer. No one else will have access to them. To create a permanent bookmark consult the GIS Department.

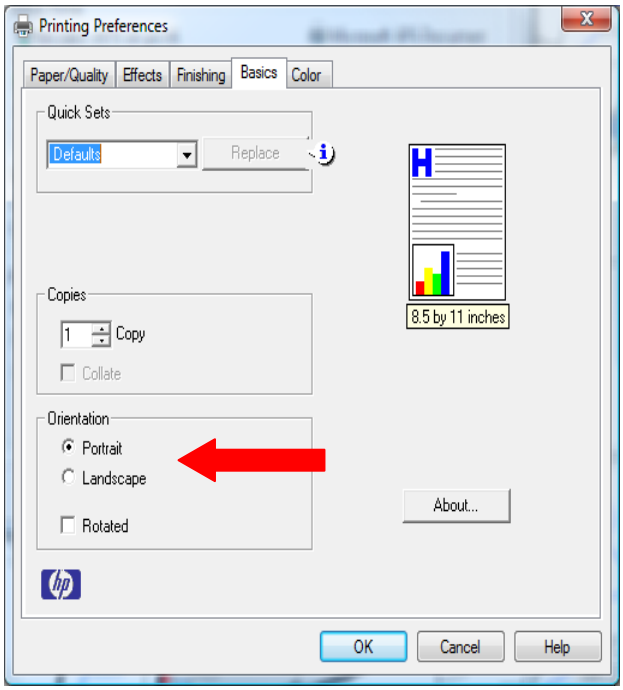
Print

Use this tool to print the current map in the viewer. A widget will open a window with a title and sub-title field to fill in. You can leave these fields blank if you do not want them displayed on the print out (they will appear in the white space above the map). Hit the 'Print' button.



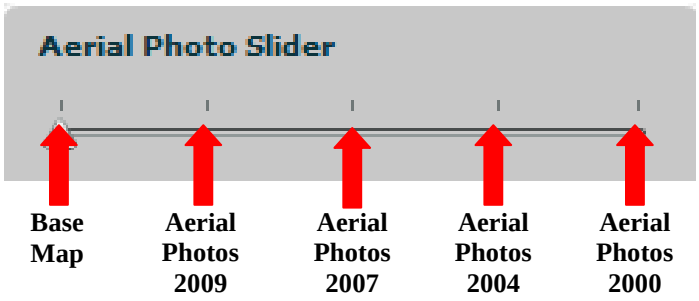
A print dialog will pop up. You can select which printer the map will be sent to. Hit the preferences button to select the map orientation and other printing options.





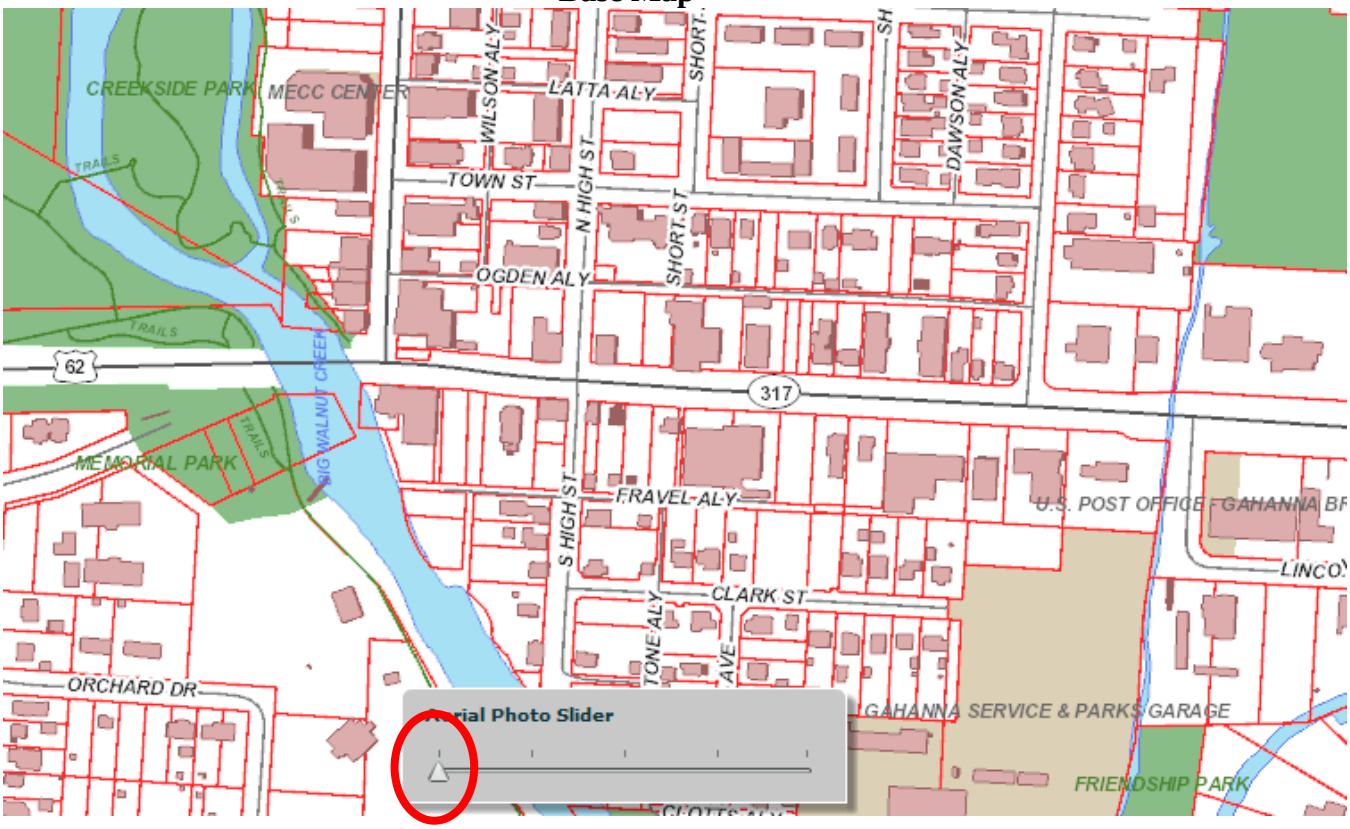
Aerial Photo Slider

The aerial photo slider allows you to view five layers that serve as the map background. The first layer is a base map. The other layers are aerial photos taken in four different years. You can only view one layer at a time.



The base map is a quick, easy to follow map that has a simple background and basic features. It displays names of features such as roads, rivers, parks, schools, and county lines.

Base Map



Aerial photos of a region are taken periodically, usually every 3-5 years. Aerial photos of Gahanna occurred in the following years: 2000, 2004, 2007, and 2009. You can choose to display the aerial photo from one of these photo series on your map.

This is helpful in displaying change over time. In addition, having the last three series may be beneficial in specific map requests. For example, you want to include the old school before the addition was built. The archive aerial photos may prove useful in this case.

Aerial Photo Map

You can have both the aerial photo and map layers turned on at the same time (as seen above). However, in order to see both simultaneously you may have to adjust the transparency for the map layers (see pg 7). The transparency for the map layers in the example above is set at 70%. Set the map layers transparency to 0% if you only want to view the aerial photo by itself.

Transparency = 70%

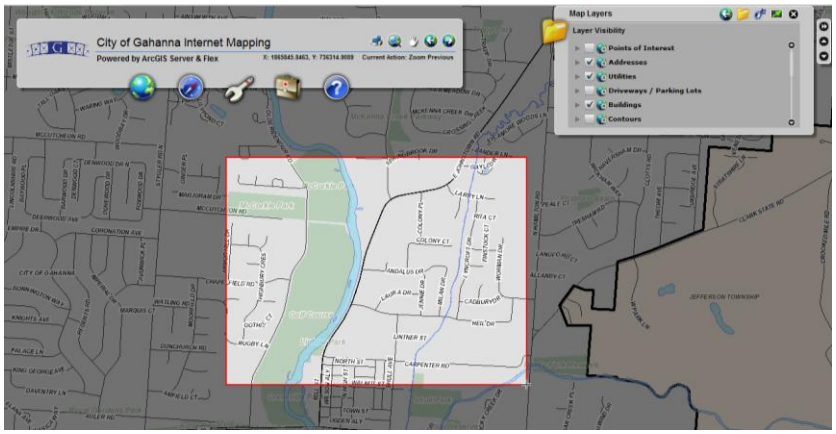
Transparency = 0%

Chapter 3 - Navigation Menu

The navigation menu features tools used to change the view of your map. You can view the map at the county level or street level. This tools supports zooming and panning to move your viewer to the desired location and scale.

Zoom In

Use this tool to view a smaller area in greater detail. Click the tool icon and move over the area of the map that you wish to view. Click once on the map, hold down the cursor, and then drag. This will create a box outlined in red showing the area that will be zoomed into. Drag the box as larger or small as you would like. The smaller the box, the more detail you will get.



Zoom Out

Use this tool to view a larger area in less detail. Click the tool icon. Then click once on the map, hold down the cursor, and drag. This will create a box outlined in red. The map will zoom the view out based on the proportion of screen you selected. The smaller the box, the greater the zoom distance. The larger the box, the less you will zoom out.

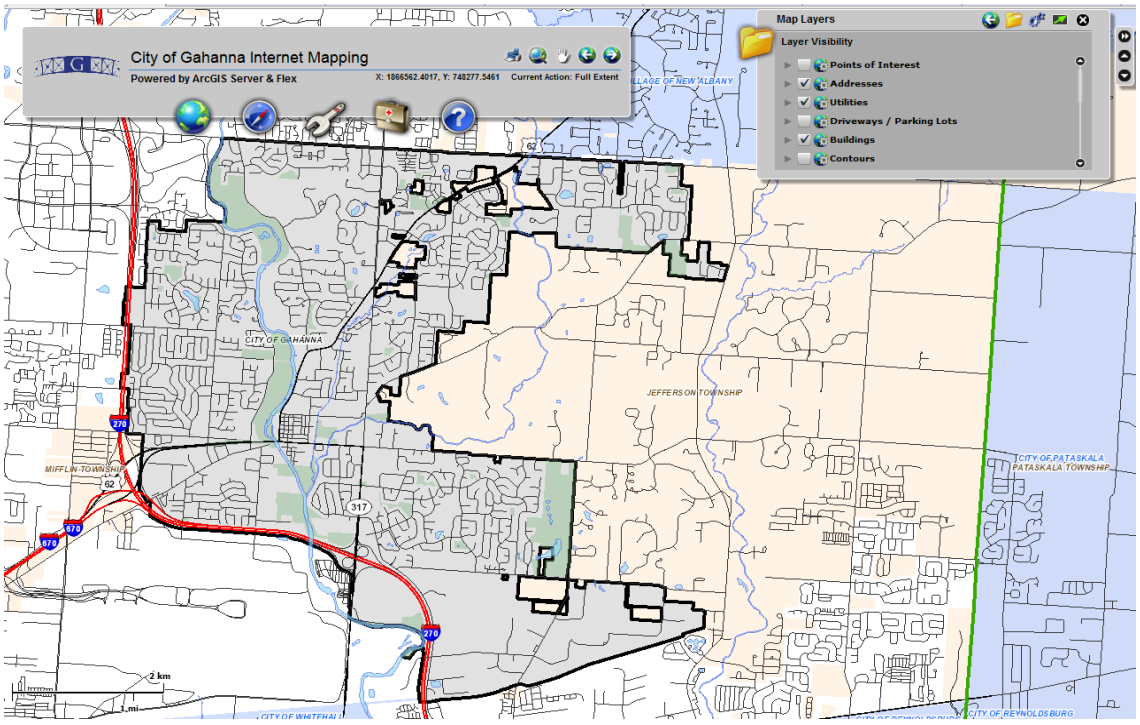
Example: if you select half of the screen, it will zoom out to twice the area you had before

(see image above)

Full Extent

This tool will go back to the default view your map was in when you opened your browser. It will not change what type of map is shown, i.e. base or aerial. You do not have to do anything after selecting the tool, i.e.: you do not have to click somewhere on the map after you select the tool. The map will automatically zoom to the full extent when you click the tool.

When you use this tool you should always be taken to a view that displays all of Gahanna's boundary (as seen below):



Pan

Use this tool to move the map in any direction while maintaining the current scale. Click on the tool icon, then click on the map once, hold down the cursor, and drag the map.

You can also use this tool to re-center the map. After you select the tool, double-click the point of interest on the map. The map will move to the center point of where you clicked ***and zoom in***.

Zoom Previous

This tool will return you to the most recent extent ***before*** your current one. For example, your view is of the Gahanna boundary. Then you zoom in to Creekside. However, you realize that this is not what you wanted. Click the tool icon and it will return you to your view of the Gahanna boundary.

You do not have to do anything after selecting the tool, i.e.: you do not have to click somewhere on the map after you select the tool. The map will automatically return to the previous extent. You can click this tool multiple times until you get to the extent you want.

Zoom Next

This tool will return you to the most recent extent ***after*** your current one. For example, your view is of the Gahanna boundary. Then you zoom in to Creekside. However, you accidentally hit the zoom previous icon and the map has returned to the view of Gahanna boundary. Click the tool icon and it will return you to your view of Creekside.

You do not have to do anything after selecting the tool, i.e.: you do not have to click somewhere on the map after you select the tool. The map will automatically return to the previous extent. You can click this tool multiple times until you get to the extent you want.

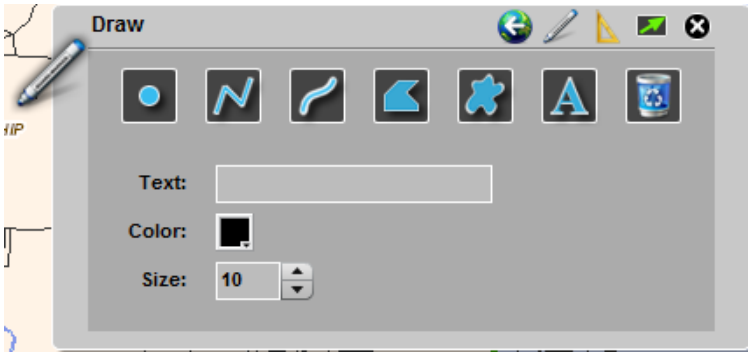
Chapter 4 - Tools Menu

The tools menu features exactly that - tools. This menu breaks away from manipulating the map display and starts to deal with the data built into the map and live map layers. With this tool, you can get precise locations based on addresses or map coordinates, search through your live map layers for a certain data point, and get detailed information on a data point.

Draw

The draw tool will let you put temporary marks/draw on the map viewer without permanently altering the map or live map layers. The draw marks will also appear on printed maps.

When you click on the tool icon a widget appears showing various drawing instruments along with text, color, and font size/line width.



The draw instruments are as follows:

Draw Point: will put a dot on the map wherever you click the cursor.

Draw Line: will draw straight lines only. Click once to start the line, click again to insert a vertex/corner, and double click to finish the line.

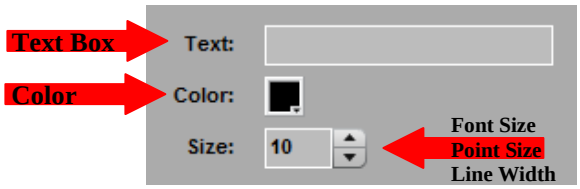
Draw Freehand Line: will draw straight and curved lines. Click and hold down the cursor and the line will follow behind the movement of the cursor. When you are finished, release the cursor and the line will end.

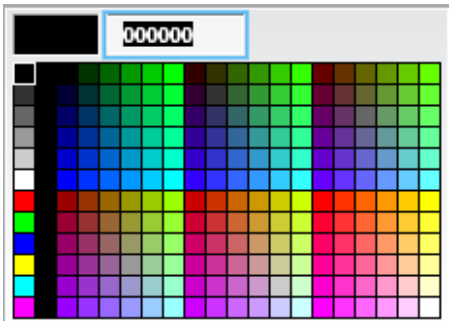
Draw Polygon: will draw straight edge polygons. Click once to start the shape, click again to insert a vertex/corner, and double click to finish the shape.

Draw Freehand Polygon: will draw straight and curved edge polygons. Click and hold down the cursor and the line will follow behind the movements of your cursor. When you are finished, release the cursor and the polygon will close itself.

Draw Text: will add words to the map. Type the text into the text box found in the widget. Select the color and font size you want. Click once on the draw text icon. Then click once on the map where you want the text to appear and the text will be displayed.

Note: you must select the color and font size ***before*** you click the map or the text will not inherit the effects





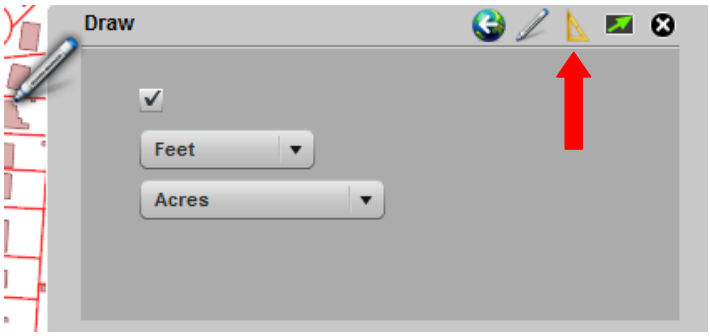
Color Options

Clear Drawing: will clear the entire map of all draw features. Click the clear icon and all drawings on the map will be removed at once.

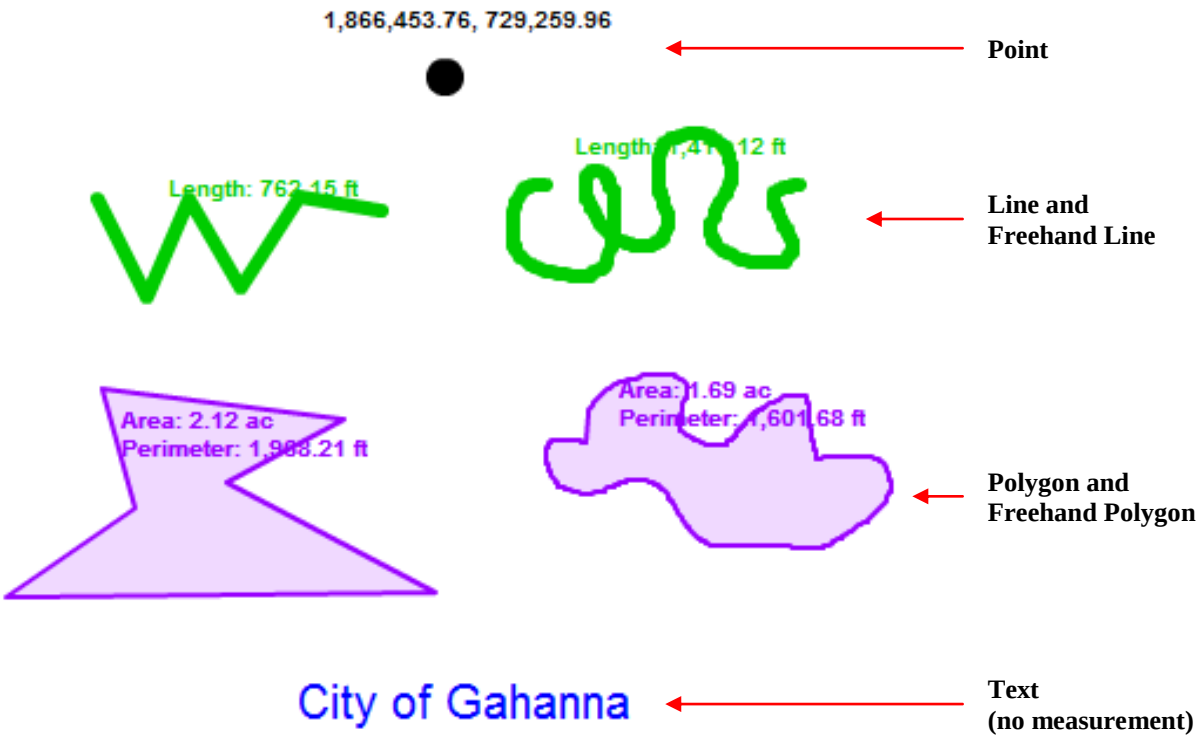
Note: In order to use any of the tools first select the color you want and the font size. Then click once on the specific draw instrument. Next, click on the map where you would like the drawing to appear.

The draw widget has a measurements feature. This tool adds map coordinates to points, length to lines, and perimeter/area to polygons. This can be accessed by clicking the measurements icon in the top right corner of the window.

To use the tool check the box and then select your desired units in the two drop down menus. The measurements will appear after you have finished drawing



You will follow the same procedure to draw as stated before. However, after you have completed a drawing, the associated measurement will be appear next to it.

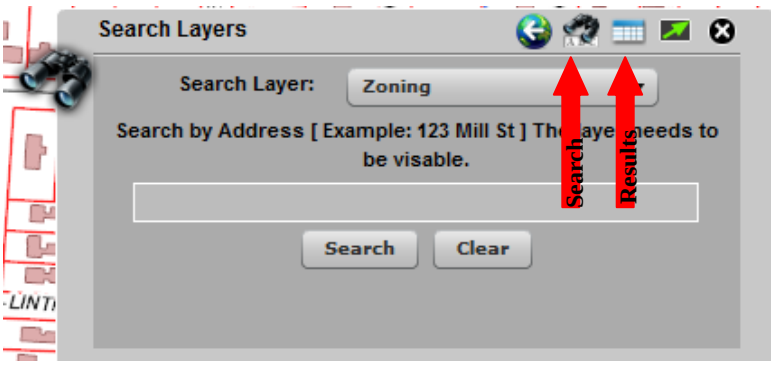


Note: the measurement option only works on shapes drawn after it is turned on (any pre-existing shapes will not show their measurements)

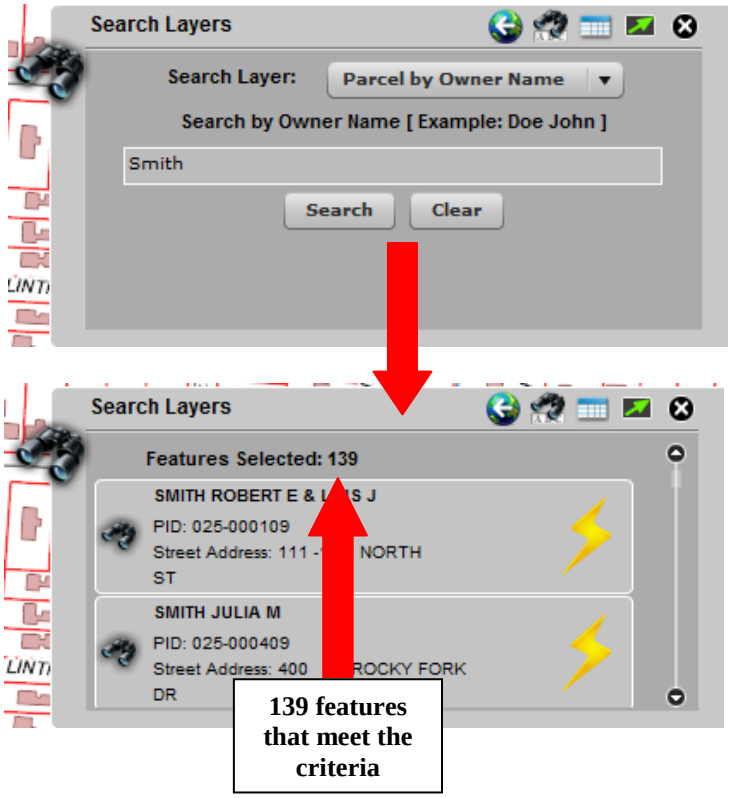
Search Layers

This tool allows you to find and select features from layers on the map. It locates features based on the name of the feature.

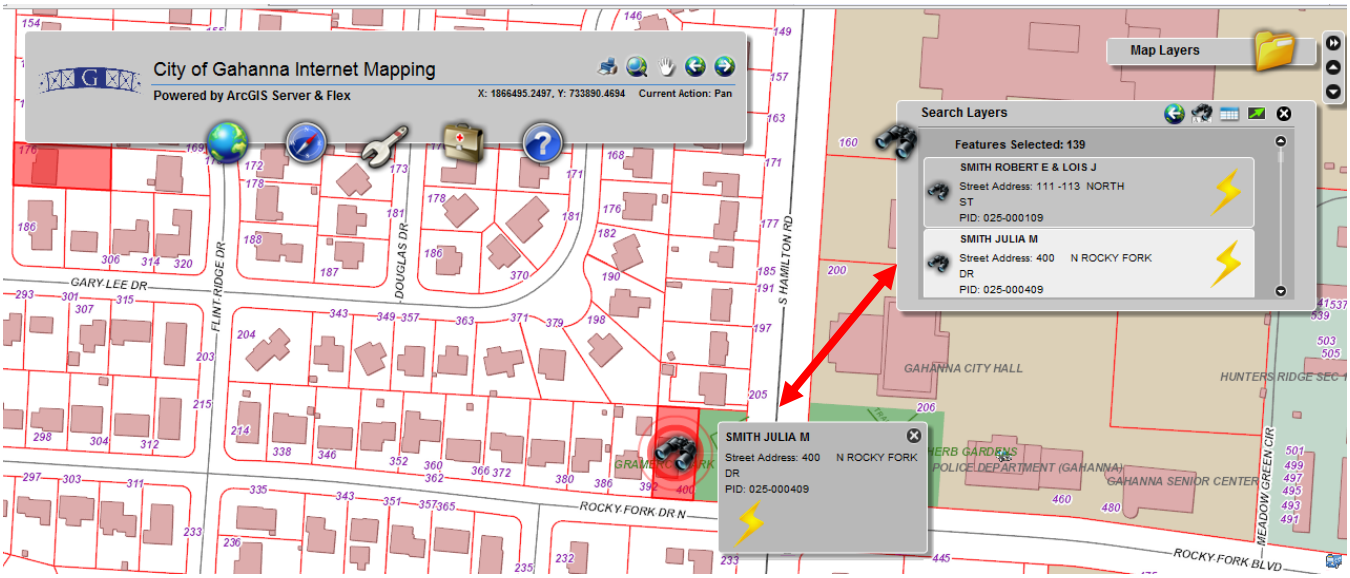
Click the search icon (in the right hand corner) to access the tool. Then select the layer you want to search in the drop down menu. Type in the name of the feature and click 'Search'.



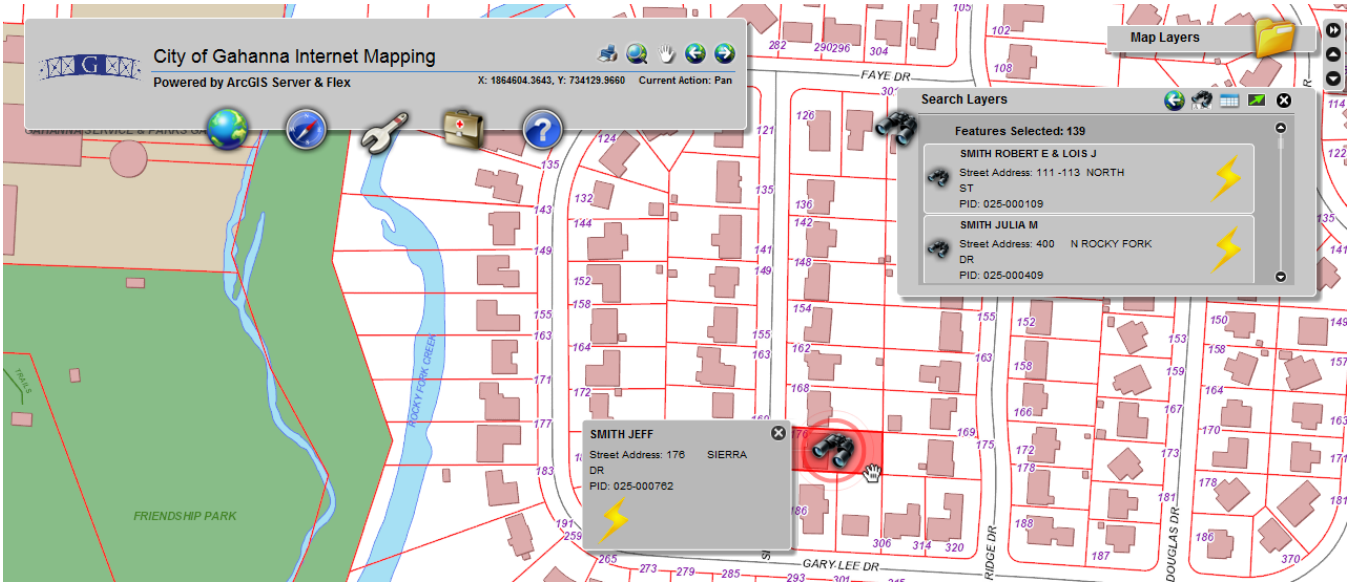
All the results will appear on the map and listed in the results tab. In the results tab, they will appear as a list of all possible features that meet the criteria. Use the scroll bar on the right side of the widget if necessary.



Click one of the features in the list to re-center the map and zoom in to that feature. The information listed in the results tab will also appear in a pop-up box next to the feature.



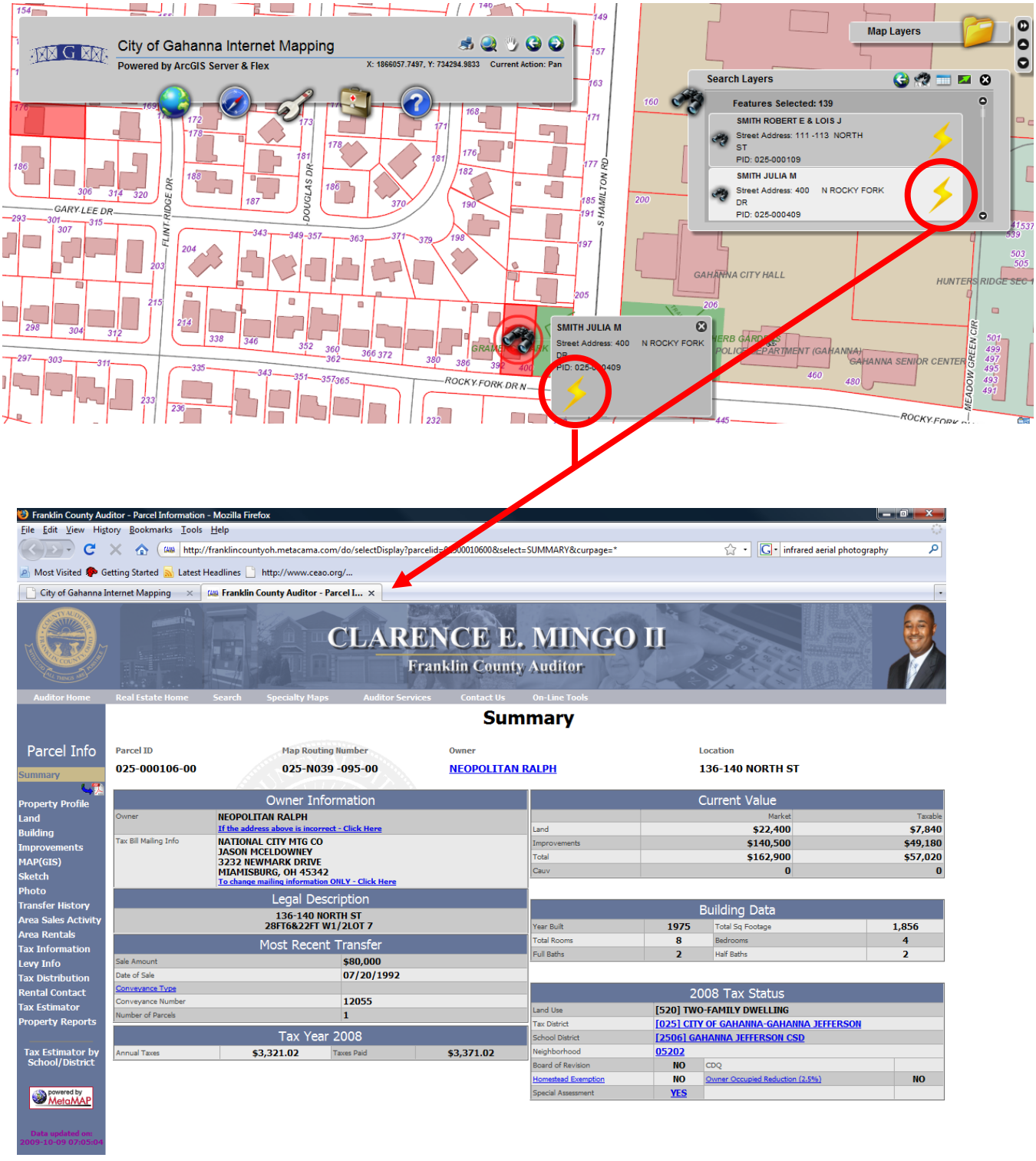
You can also manually pan over results in the map. Once your cursor is over a result (shaded in red), the search icon will appear over the feature and its information will be displayed.



To conduct a new search return to the search window. Click 'Clear' and type in new text. Next, click 'Search' to conduct another search.

Note: If you ever see the hyperlink icon ⚡, it means that there is additional information available about the feature. This is usually a link to a website.

Click the icon once and a tab will appear in your internet browser linking you to the information.



Identify Layers

This tool allows you to view detailed information about specific features in the map. Multiple features may be selected at once. However, only features from one layer can be selected at a time.

To use the tool, click the identify icon in the widget (right hand corner). Select the layer that you would like to search in the drop-down menu. Click on the appropriate identify instrument. Then click the feature(s) on the map that you want to research.

Identify instruments are as follows:

Identify by Point: will identify layer information for the feature that the point lies within.

Identify by Line: will identify layer information for features that the line intersects. This tool draws straight lines only. Click once to start the line, click again to insert a vertex/corner, and double click to finish the line.

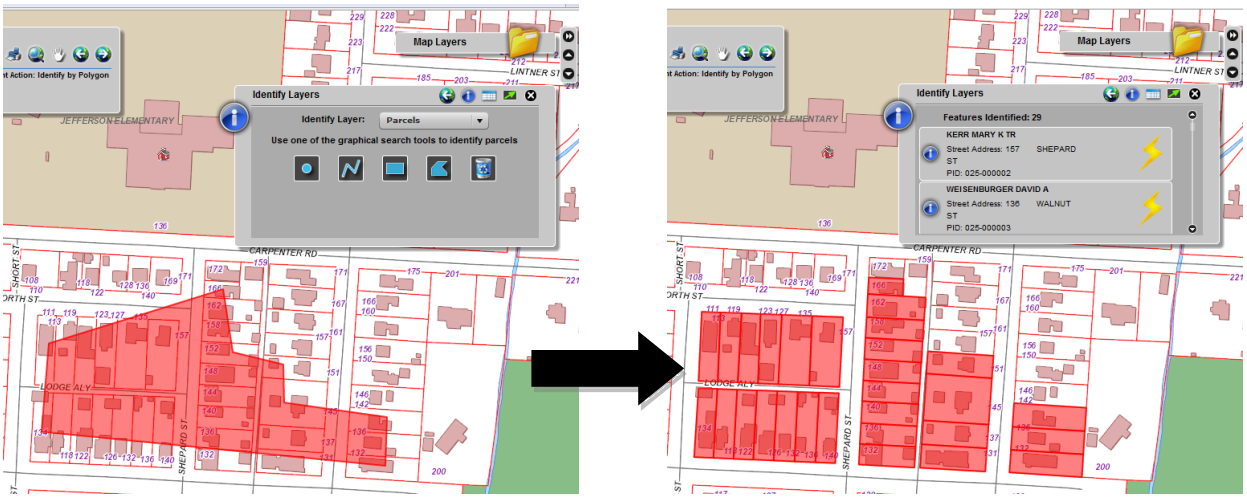
Identify by Rectangle: will identify layer information for features that the rectangle touches. Click and hold down the cursor and the rectangle will follow behind the movement of the cursor. When you are finished, release the cursor and the rectangle will end.

Identify by Polygon: will identify layer information for features that the polygon touches. Click once to start the shape, click again to insert a vertex/corner, and double click to finish the shape.

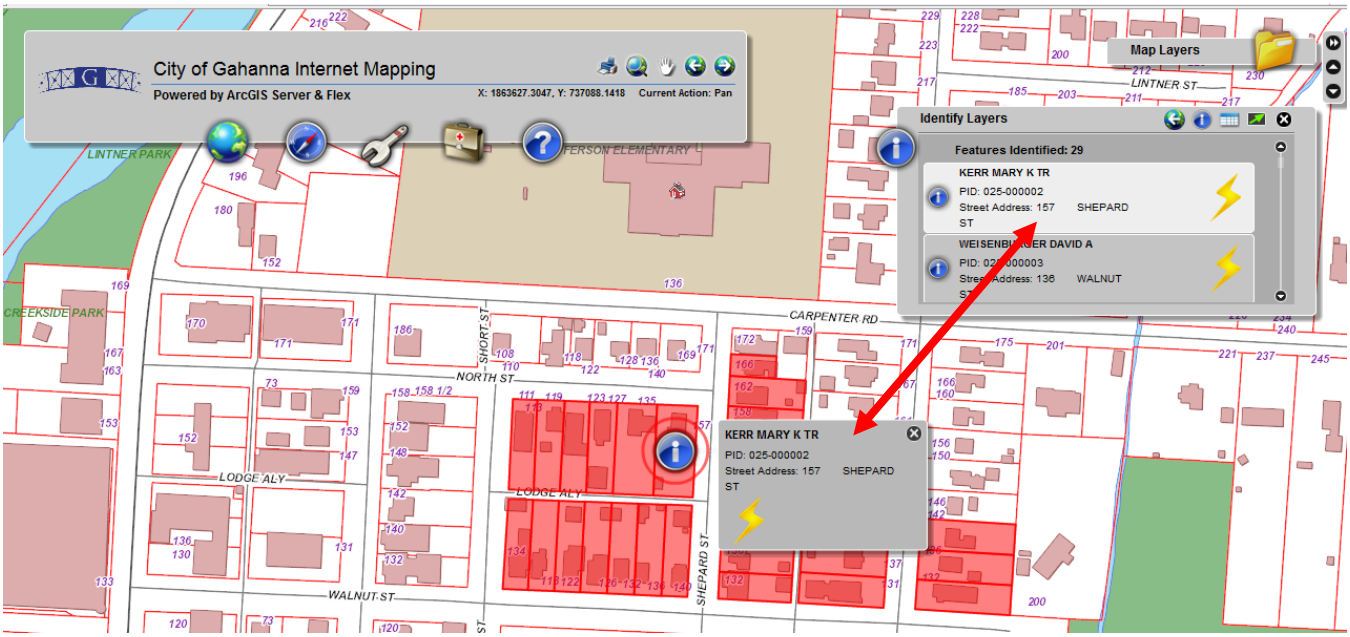
Clear Identify: will clear the entire map of all identify queries. Click the clear icon once and all the identify queries on the map will be removed at once. They will also be removed from the results tab.

Once you have conducted an indentify query using one of the instruments, the information for all selected features will be listed in the results tab of the widget. Use the scroll bar on the right side of the widget if necessary.

Polygon Instrument **Result of Selected Features**

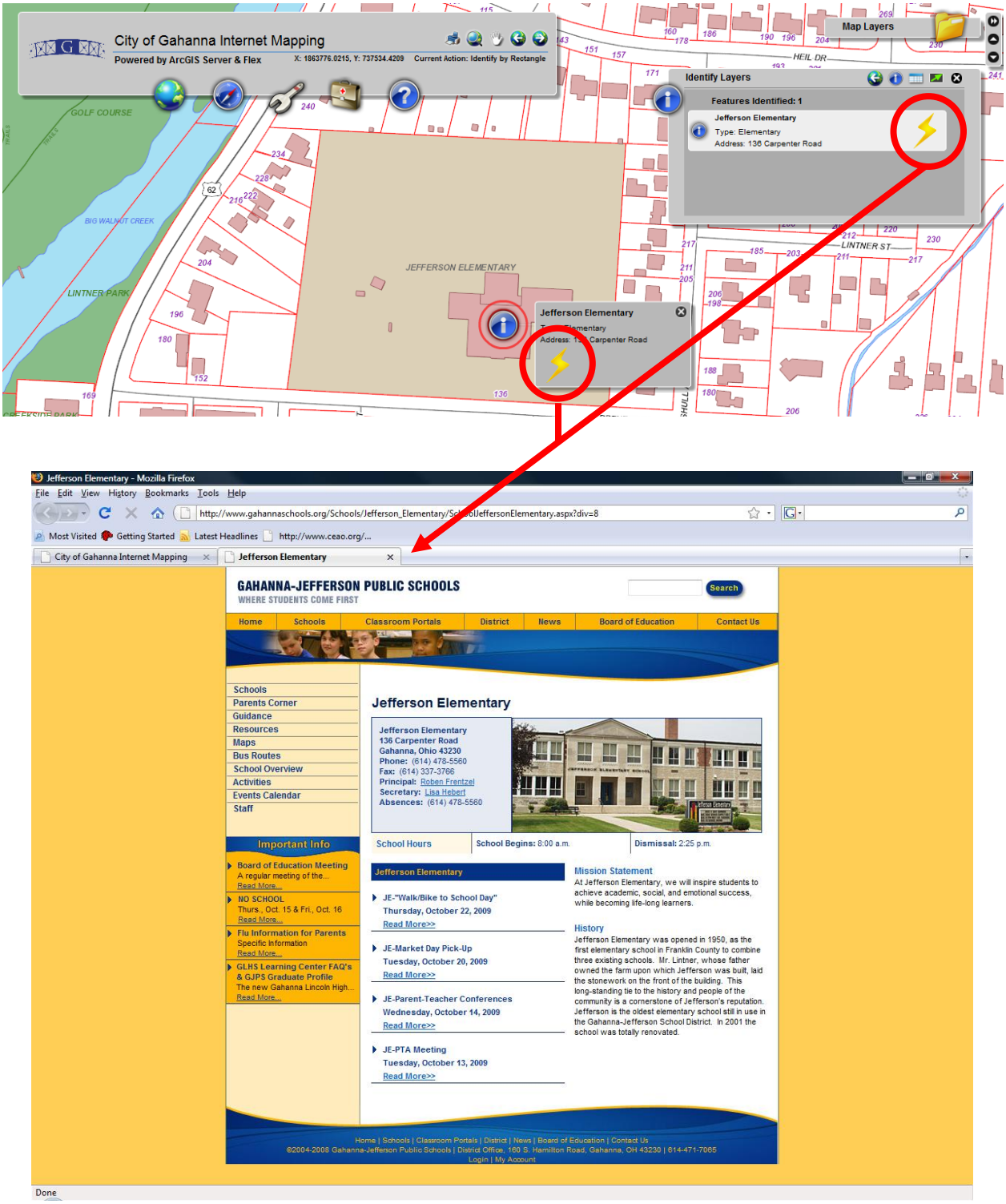


Click on one of the features listed in the widget that you would like to review. The map will re-center the map over the feature. It will also highlight the identify icon and the selected info will appear in a pop-up box next to the icon.



Note: If you ever see the hyperlink icon , it means that there is additional information available about the feature. This is usually a link to a website.

Click the icon once and a tab will appear in your internet browser linking you to the information.



Locate Addresses

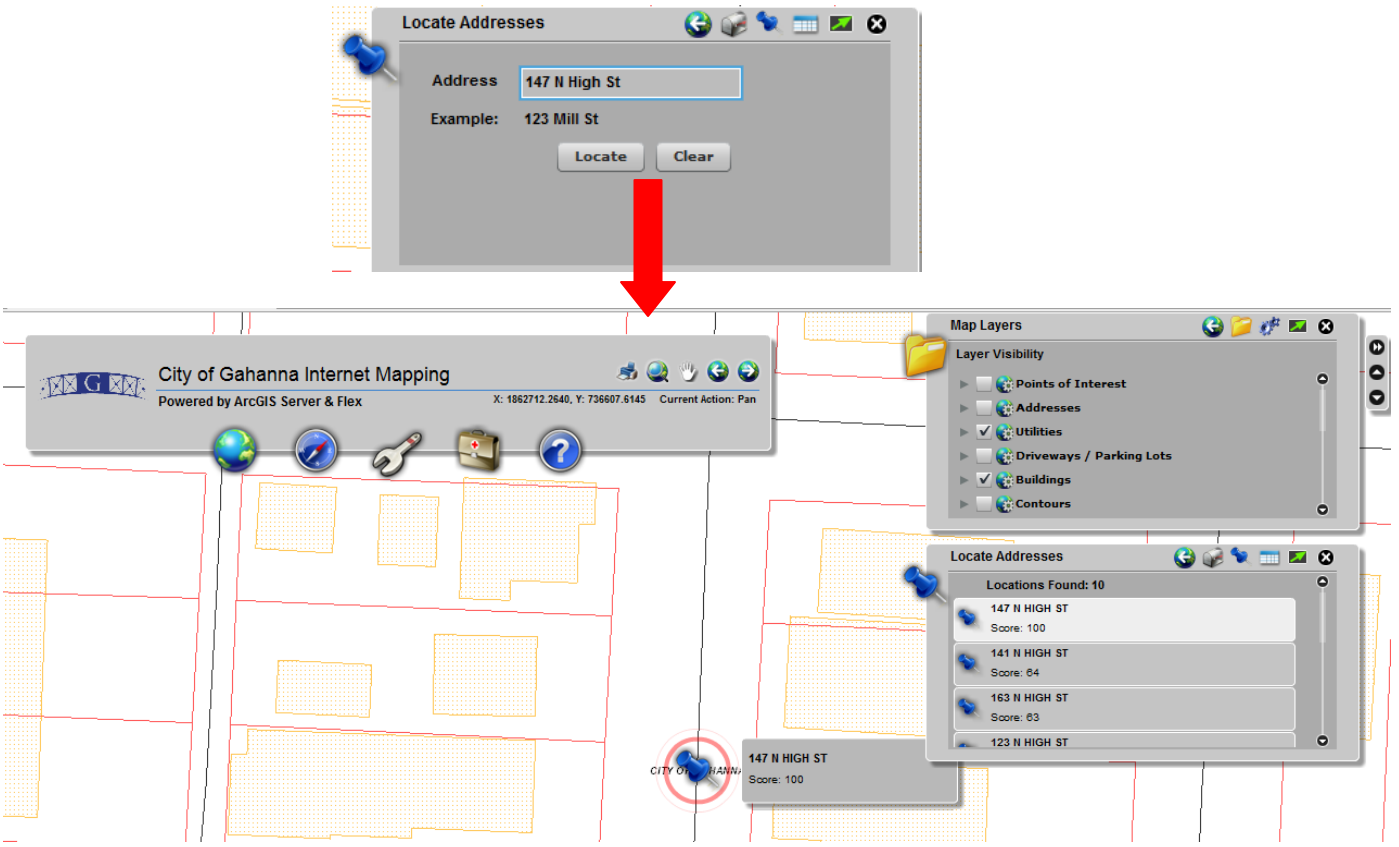
This tool allows you to pin point specific locations by its street address or latitude and longitude coordinates.

Address Search

This option lets you type in a street address for the location you are looking for. Fill in the address as completely as you can and then click 'Locate'. The possible results will show up as a list in the widget window along with push-pins on the map. Click on one of the possible locations and the map will pan and zoom to the requested location.

The results will also give you the search score of each listed location. This score is on a scale of 1 to 100. It indicates the feature's compatibility to your criteria. The higher the score, the more confident the search was that the location is the correct one.

To conduct another search click 'Clear'. You can also just delete the previous text and type in new a new address. Click 'Locate' to conduct a new search.



Map Coordinates Search

This option allows you to find a location based on the latitude and longitude coordinates. The coordinates must be entered in ***decimal degrees*** (ie: 47.258333 not 47° 15’ 30”)

Abbreviations	
DMS = degrees° minutes' seconds"	47° 15’ 30”
DM.m = degrees° minutes'	47° 15.5'
D.d = decimal degrees°	47.2583°

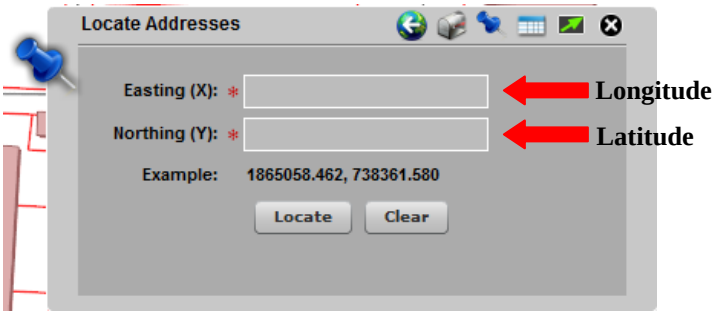
To review decimal degrees and how to convert coordinates visit the following websites:

http://www.directionsmag.com/latlong.php

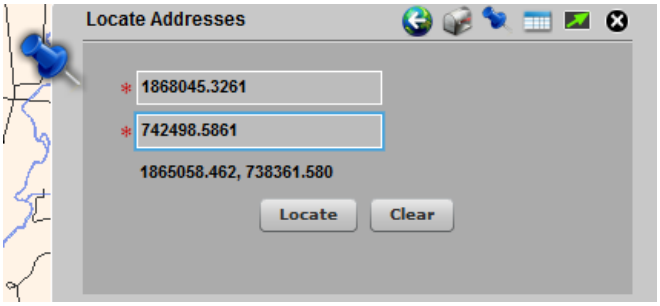
http://www.jeepreviews.com/wireless-gps-coordinates/

http://id.mind.net/~zona/mmts/trigonometryRealms/degMinSec/degMinSec.htm

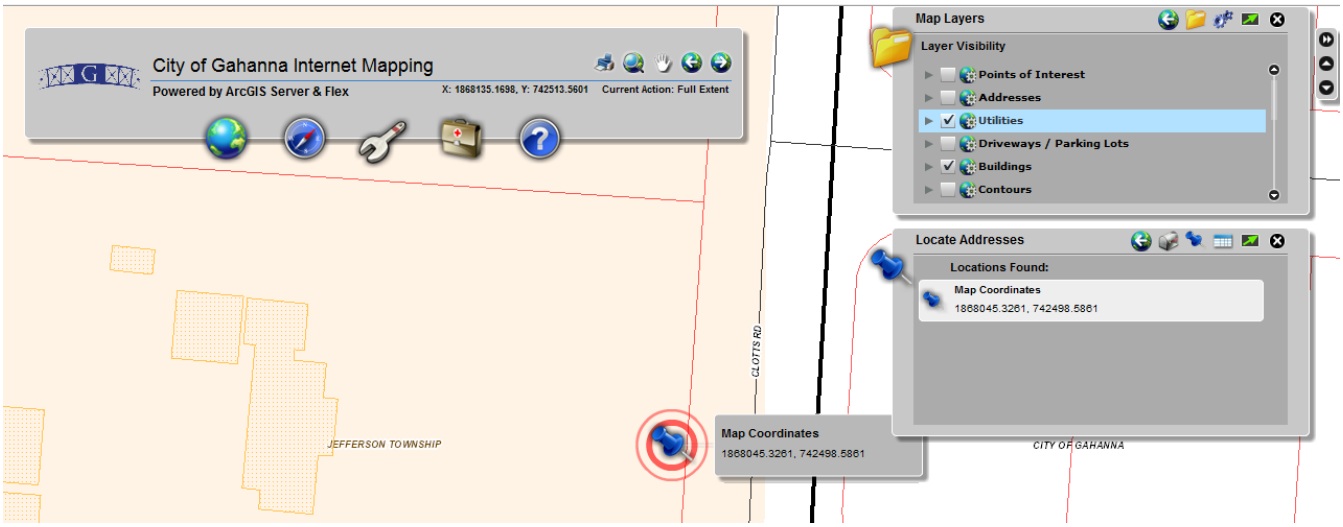
The Easting will be the x coordinate. This represents the location's longitude. Enter this value on the top line. The Northing will be the y coordinate. This represents the location's latitude. Enter this value on the bottom line.



Once you enter the coordinates click 'Locate'. The possible results will show up as a list in the widget window along with push-pins on the map.



Click on one of the possible locations and the map will re-center and zoom in to the requested location.



Note: If the results window opens with a rotating circle and the word 'Loading...' for more than a few seconds, your search was probably unsuccessful, and you should go back to the search window and review what you typed.

In order to conduct another coordinate search, click 'Clear'. You can also just delete the previous coordinates and type in new ones. Click 'Locate' to conduct a new search.

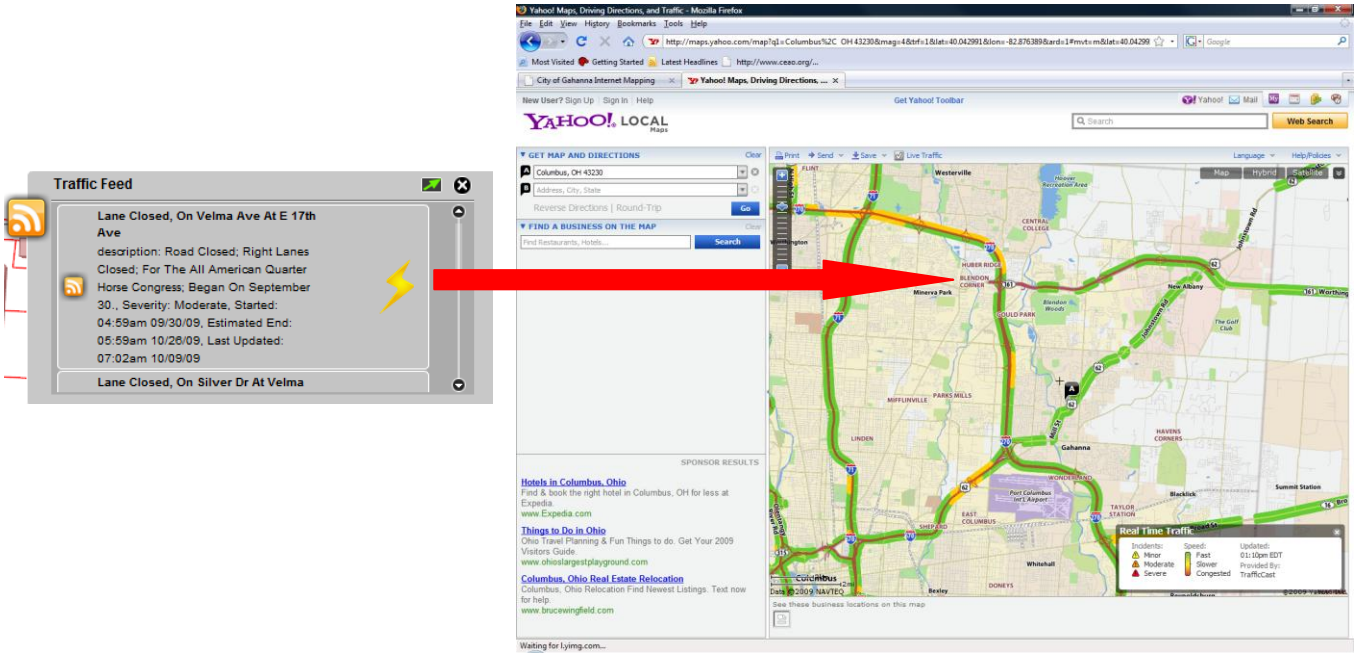
Chapter 5 - Resources

The resources menu features tools that add more utility to the map. This tool enables the user to do more map analysis using Census demographic data. RSS feeds and live feeds such as traffic cameras can be accessed. The viewer can even compute drive directions based on time or distance and add barriers that alter direction output.

Traffic Feed

The traffic feed is a type of RSS feed. RSS stands for 'really simple syndication'. A RSS feed is a format for delivering regularly changing (frequently updated) web content. It is used to retrieve the latest content from several websites in one standardized format and in one place. It serves as a time saving technique since you do not need to visit each site individually. Examples of RSS feeds include: weather, traffic, news-related sites, headlines, update notices and blogs.

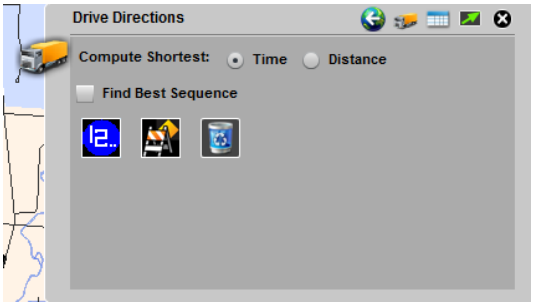
To use the traffic feed, click on the tool icon. A widget will appear showing all the current traffic alerts, updates, and information. Use the scroll bar on the right to view all the feeds. If you click on the identify icon, a new tab will appear in the internet browser that displays a Yahoo! map showing real time traffic.



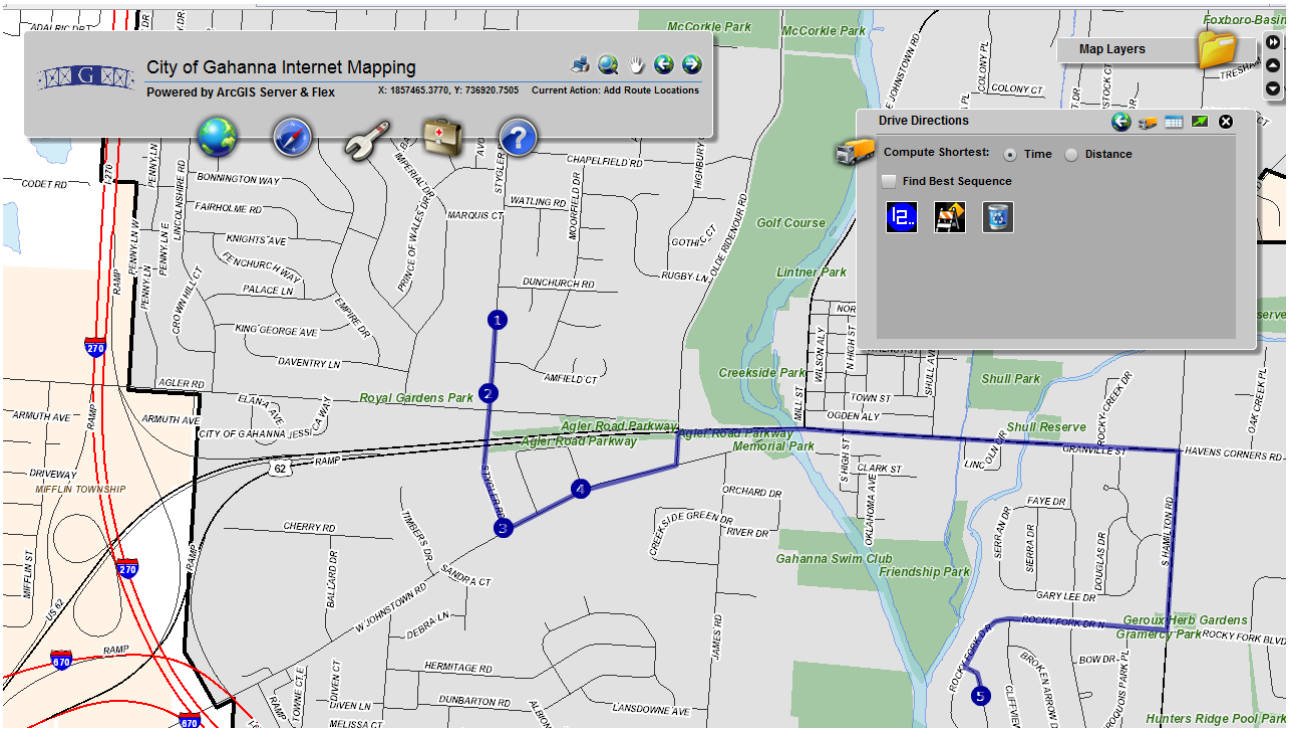
Drive Directions

This tool is similar to a search engine direction tool . It will give you detailed turn by turn directions to a point of origin to a specified destination. You can decide if the route is determined by shortest time or distance.

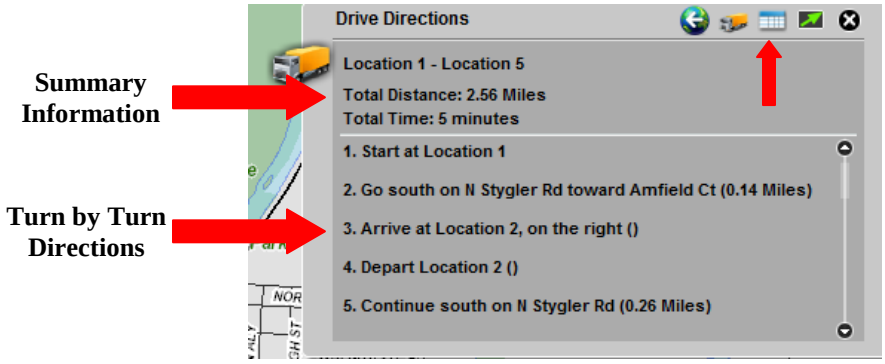
Click the tool icon to access the directions widget. Select whether you want the map to compute the route based on time or distance, In most cases the routes will be the same for the two; however, sometimes they will differ based on speed limits, stoplights, etc.



You must have at least two stops (origin/destination) to create a route. You can add more if need be. Click the 'Add Stop' icon and click once on the map on each destination location. The map will automatically calculate the route.

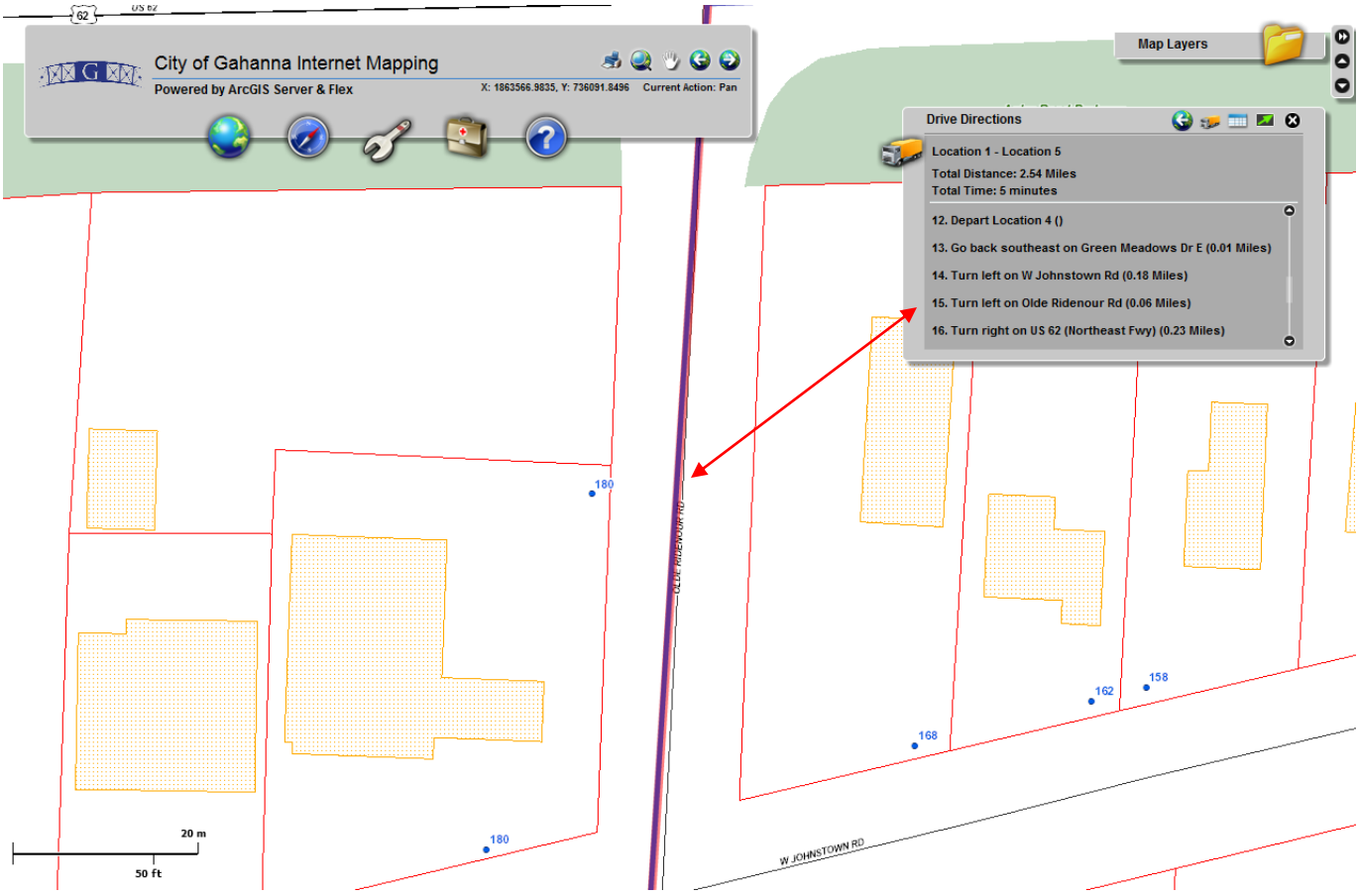


Click the 'Directions' icon in the top right corner of the widget to view the turn by turn directions.

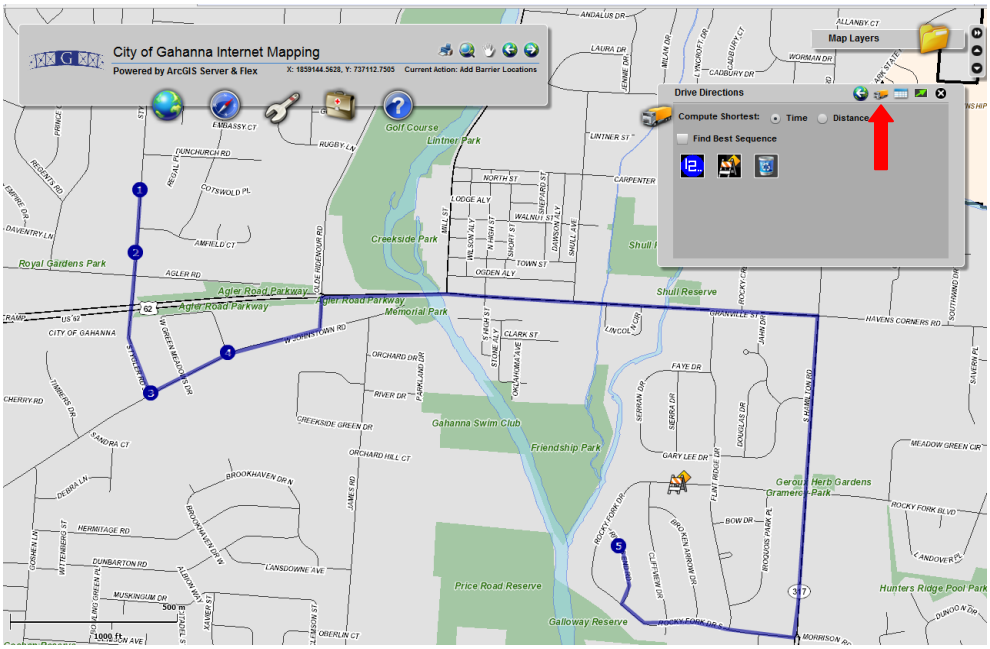


You can also click on one of the turn by turn direction steps and the map will zoom into the selected segment.

Example: the segment selected below corresponds to Step 15 in the directions

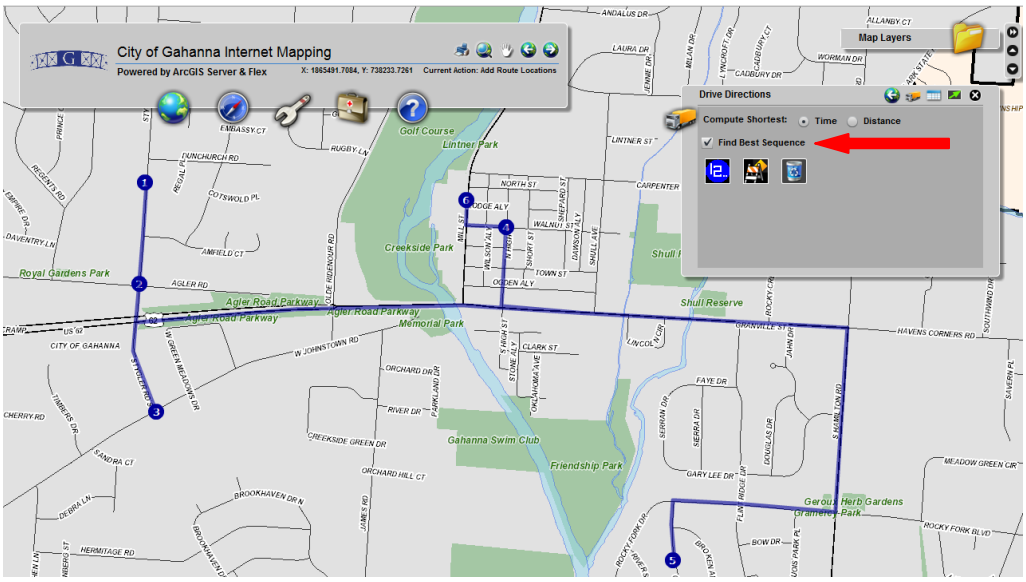


Click the 'Create Route' icon in the top right corner of the widget to return to the directions tools. Click the 'Add Barrier' icon to add known road closures that may affect your route (as seen below):



Use the 'Clear' icon to clear your current route in order to create a new one.

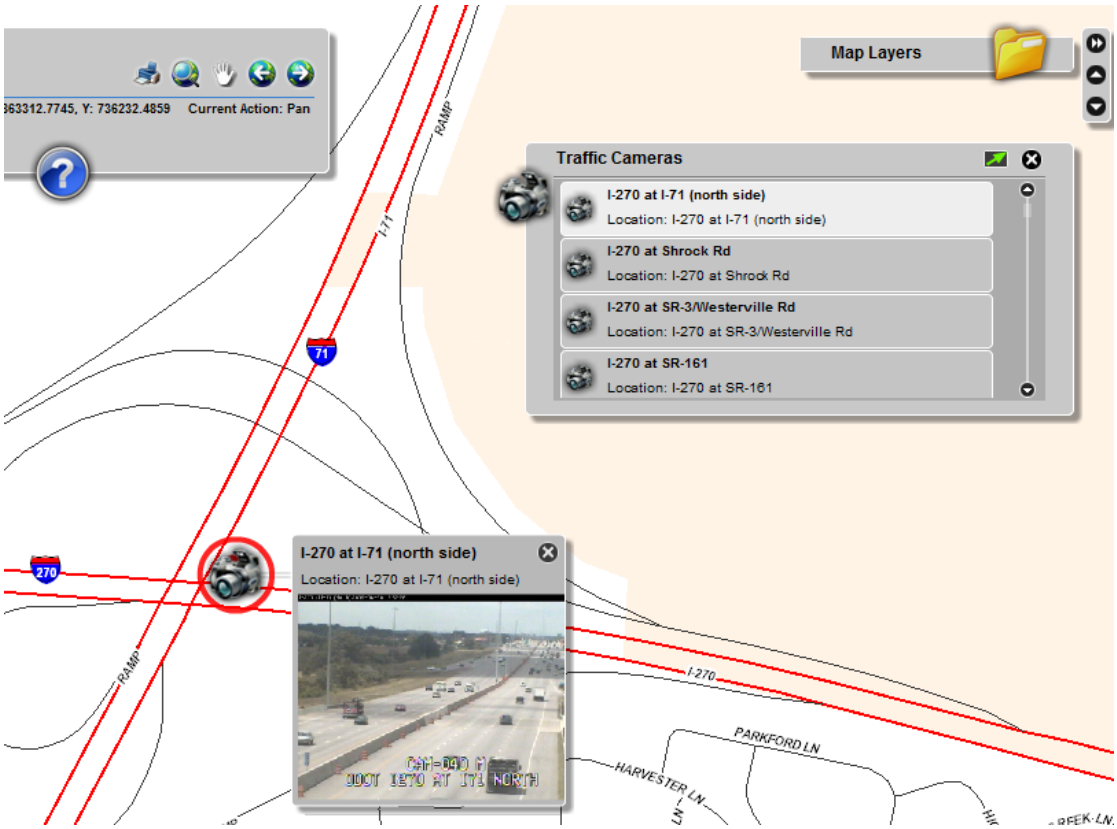
There is also has a feature that will calculate the course of travel that will be the most efficient based on the computation factor: time or distance. For example, the route below has 6 stops. However, since time is selected as the computation factor the map has calculated that the most time efficient travel route will be: Stop 1→ Stop 2→ Stop 3→ Stop 5→ Stop 4→ Stop 6



Columbus Traffic Cameras

This tool shows the location of all the traffic cameras in Columbus. Each camera has a live feed that the internet map is linked to. When you click on the traffic camera tool icon, a widget will appear listing all the Columbus traffic cameras.

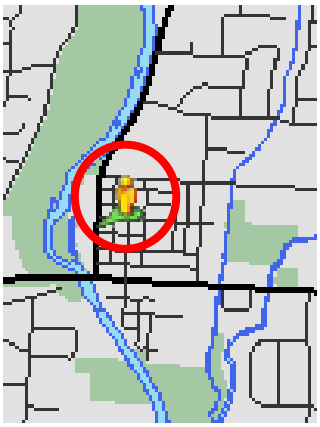
When you click on a camera in the list, the map will center and zoom in on the camera. A window showing the traffic cam view will also appear next to the location. You can also pan your cursor over the camera and the view window will appear.



Google Street View

This tool allows Google street view to be accessed on the internet website.

Click on the icon inside the widget to activate the tool. Your cursor will change to the Google street icon. Click once on the location you would like to view. A new window will pop up showing the Google street view. This window had the same functionality as the Google street view home site. You can pan, rotate, and zoom.



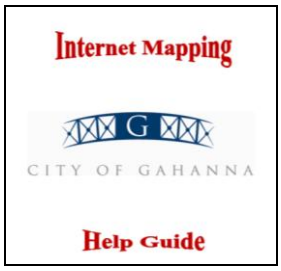
If no image appears then the Street View is not available.

Chapter 6 - Help Menu

The Help Menu provides extra assistance and information. There is a link to this .pdf document, a link to Gahanna's homepage, and information about the ArcGIS Server and Flex which runs the internet mapping site.

Help

This tool opens a .pdf in a separate tab or window that displays this help document. The help document is designed to give descriptions of the program tools found on the internet mapping site and instructions on how to use the them. Just click the tool icon to access the .pdf.

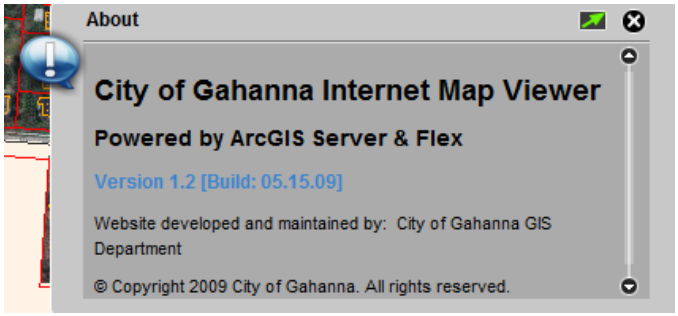


Home

This tool opens Gahanna's homepage in a separate tab or window. Just click on the tool icon to access the website.

About

This tool opens a widget that presents information regarding ArcGIS Server and Flex. It shows what version is being used, who developed and maintains the system, and the copyright.



Chapter 7 - Troubleshooting

Adobe Flash Player

In order to view this document you will need Adobe Flash Player. The following link will take you to the download site: http://get.adobe.com/flashplayer/?promoid=BUIGP

Map Viewing Issues

There is a considerable amount of data that needs to be transferred between your computer and the server that contains all the data. At times the internet mapping site may be slow, stall, or freeze. If this happens, just refresh your browser and/or clear your cache. If you are seeing a grey screen, trying zooming out a little. If you are not seeing the features that you activated, you may not be zoomed in enough.

Hint: you can also use your mouse wheel to zoom in/out quickly without clicking on the zooming tool icons. Another easy way to zoom in is to hold down the shift key, click on the map with your mouse and hold, then drag a box around the area you want to zoom in on.

Wrong Location in Search

If the location you searched is not where you think it should be, double check its score to see whether it is high or low. The score next to each search result is from 1 to 100. If the score is low, it means that the system could not find enough references to make an accurate guess at the location.

Possible Solutions:

1. Check your spelling
2. Add more information
3. Check that the coordinates were entered correctly -- Remember, coordinates should be entered longitude (east/west) first then latitude (north/south)